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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,786	08/09/2001	James Davis	081607-1150	5372

24504 7590 09/13/2004

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EXAMINER

EL HADY, NABIL M

ART UNIT PAPER NUMBER

2154

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/925,786

**Applicant(s)**

DAVIS ET AL.

**Examiner**

Nabil M El-Hady

**Art Unit**

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/6/01 &amp; 10/4/01</u> | 6) <input type="checkbox"/> Other: _____  |

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1. Claims 1-27 are pending in this application.
2. The information disclosure statement (IDS) submitted on 10/1/2001 and 12/3/2001 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.
3. In response to the double patenting rejection, Applicants submitted a terminal disclaimer pursuant to 37 C.F.R. 51.321(c). Applicants indicated that submitting the terminal disclaimer is solely to advance prosecution of the application, without conceding that the double patenting rejection is properly based.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
5. Claims 1-4, 6-8, 10-12, 15-17, 20-25, and 27, are rejected under 35 U.S.C. 102(e) as being anticipated by Cunningham et al. (US 6,124,806), hereafter "Cunningham".
6. As to claims 1 and 23, Cunningham discloses the invention as claimed including a site controller (DCM 112, Fig. 1) adapted to be used in an automated monitoring system configured

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for monitoring and controlling a plurality of remote devices (SIM 102, Fig. 1) via a host computer connected to a first communication network (CN 118, Fig. 1), the site controller configured for controlling communication with the host computer (HM 120, Fig. 1) and a plurality of communication devices that define a second communication network associated with the plurality of remote devices (108, Fig. 1) (col. 4, lines 47-67), the site controller comprising: a transceiver configured to communicate with the plurality of communication devices via the second communication network (2008, Fig. 25; and inherent in col. 4, lines 56-60; and col. 6, lines 11-18; 45-49); a network interface device configured to communicate with the host computer via the first communication network (inherent in col. 4, lines 60-62; and col. 7, lines 19-24); logic configured to: manage communication with each of the plurality of communication devices (col. 22, line 8 to col. 23, line 57; and Figs. 35 and 36), via a first communication protocol (col. 12, lines 52-59; and col. 33, line 45 to col. 34, line 49), based on one or more communication paths for each of the plurality of communication devices, each communication path comprising one or more communication devices involved in the communication link between the transceiver and each of the plurality of communication devices (col. 6, lines 20-31; and 108, Fig. 1); and manage communication with the host computer via a second communication protocol (col. 45, line 54 to col. 46, line 5).

7. As to claim 15, the claim is rejected for the same reasons as claims 1 and 23 above. In addition, Cunningham discloses a method for controlling communication with a host computer (Host Module HM 122, Fig 1) connected to a first communication network (Communication network CN 118, Fig. 1) and a plurality of communication devices (Sensor Interface Module SIM 102, Fig. 1) that define a second communication network (hardwire or Wireless transmission

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108, Fig. 1) associated with a plurality of remote devices (inherent) that are to be monitored and controlled by the host computer (Host Module HM 122, Fig.1), the method comprising the steps of determining a unique address for each of the plurality of communication devices by receiving an initialization message (inherent in col. 13, lines 54-56; col. 14, lines 12-20; and col. 15, lines 4-12), determining with which of the plurality of communications devices that each of the plurality of communication devices has a communication link (inherent in col. 6, lines 20-50) ; based on the plurality of unique addresses and which of the plurality of communications devices each of the plurality of communication devices has a communication link with, determining one or more communication paths associated with each of the plurality of communication devices (inherent in col. 6, line 51 to col. 7, line 17; and col. 16, lines 20-35); managing communication with each of the plurality of communication devices (col. 22, line 8 to col. 23, line 57; and Figs. 35 and 36), via a first communication protocol (col. 12, lines 52-59; and col. 33, line 45 to col. 34, line 49), based on or more of the communication paths associated with each of the plurality of communication devices (col. 6, lines 20-31; and 108, Fig. 1); and managing communication with the host computer via a second communication protocol (col. 45, line 54 to col. 46, line 5).

8. As to claim 2, Cunningham discloses the logic as software and discloses a micro controller for implementing the logic (col. 22, lines 7-8).

9. As to claims 3, 16, and 24, Cunningham discloses each of the plurality of communication devices are wireless communication devices (col. 6, lines 11-13), the plurality of wireless communication devices being disposed throughout a geographic area such that the antenna patterns associated with the plurality of wireless communication device overlap to create a

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coverage area that defines the second communication network (inherent in col. 6, lines 11-19; col. 7, lines 32-44; and col. 14, lines 1-11).

10. As to claims 4, 17, and 25, Cunningham discloses the first communication network as a wide area network (col. 32, lines 41-45; and col. 45, lines 60-67) and the second communication protocol comprises TCP/IP (col. 34, lines 58-65).

11. As to claim 6, Cunningham discloses the network interface device is selected from the group consisting of a dial-up modem, an ISDN card, a DSL modem, and a LAN card inherent in col.32, lines 41-45).

12. As to claim 7, and 27, Cunningham discloses the logic is configured to determine the one or more communication paths for each of the communication devices (inherent in col. 6, line 51 to col. 7, line 17; and col. 16, lines 20-35); by receiving initialization commands from the plurality of communication devices (inherent in col. 13, lines 54-56; col. 14, lines 12-20; and col. 15, lines 4-12).

13. As to claim 8, Cunningham discloses one or more look-up tables residing in a memory (col. 31, lines 6-17).

14. As to claims 10, 11, and 21, Cunningham discloses the logic is configured to receive a first message generated by one of the plurality of communication devices via the second communication network , the first message comprising a first communication device identifier associated with the one of the plurality of communication devices associated with one of the

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plurality of remote devices that generated the first message (col. 13, lines 54-56) and a predetermined function code corresponding to a data signal provided by the one of the plurality of remote devices associated with the one of the plurality of wireless communication devices that generated the message (inherent in col. 14, lines 20-24), the logic is configured to determine, based on the first communication device identifier, the one of the wireless communication devices that generated the first data signal (inherent in col. 14, lines 18-20).

15. As to claim 12, Cunningham discloses the logic is configured to translate the first message into a second message configured for transmission to the host computer via the first communication network (inherent in col. 32, lines 46-54).

16. As to claim 20, Cunningham discloses receiving a request, via the first communication network, from the host computer for information related to one of the plurality of remote devices, providing a command message to the second communication network for delivery to the one of the plurality of remote devices based on one of the communication paths associated with the communication device corresponding to the one of the plurality of remote devices (col. 32, lines 15-24; col. 44, lines 14-35, 54-64); and col.45, lines 54-59).

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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18. Claims 5, 9, 13, 14, 18, 19, and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham et al. (US 6,124,806), hereafter "Cunningham" as applied to claims 1-4, 6-8, 10-12, 15-17, 20-25, and 27 in view of Johnson et al. (US 5,673,252), hereafter "Johnson".

19. As to claims 5, 9, 18, 19, and 26, Cunningham discloses the first communication protocol comprises a data packet, the data packet comprising: a from address, and a command number comprising a function code, a data field, a checksum field; and a packet number field (col. 14, lines 13-54; and Fig. 21). Cunningham, however, does not disclose other fields in the packet, such as a to address, a packet length field; a packet maximum field, and a message number field. Johnson, on the other hand, discloses a message packet that includes these fields (e.g. Fig. 3). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Cunningham and Johnson because Johnson's extended packet fields would increase the communication efficiency in Cunningham's system by allowing for broadcast messages and avoiding network congestion.

20. As to claims 13 and 14, Cunningham does not disclose a second communication identifier associated with an intermediate communication device. Johnson, on the other hand, discloses a second communication identifier associated with an intermediate communication device (e.g. the to address field, Fig. 3). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Cunningham and Johnson because Johnson's extended packet fields would increase the communication efficiency in Cunningham's system by allowing for broadcast messages and avoiding network congestion.



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21. Applicant's amendment to the claims filed 5/12/2004 has overcome objections and 112, 2<sup>nd</sup> paragraph rejections raised in the first office action. Applicants' arguments filed 5/12/2004 have been fully considered. However, they are not persuasive to overcome other rejections. Accordingly, rejection of claims 1-27 is maintained.

22. In the remarks, applicants argued in substance that (1), Cunningham fails to teach site controller configured for controlling and managing communication with the host computer and the plurality of communication devices, (2) Cunningham fails to teach means for managing communication with each of the plurality of communication devices, (3), Cunningham fails to teach determining one or more paths associated with each of the plurality of communication devices, and managing communication with each of the communication devices. Examiner respectfully disagree and traverses applicants' remarks.

23. As to point (1), the controller of Cunningham manage and control communication with each of the plurality of communication devices as disclosed in col. 22, line 8 to col. 23, line 57; and Figs. 35 and 36; and manage and control communication with the host computer as disclosed in col. 45, line 54 to col. 47, line 10. This is also disclosed in Fig. 49 where the Telemetry Gateway 6326 acts as the controller managing and controlling communication to the gas meter 6302 and electricity meters 6304 as well as to the host 6340, see col. 47, lines 13-53. As to point (2), Cunningham teaches means for managing communication with each of the plurality of communication devices as disclosed in transmitter/ receiver 2008 of Fig. 25 of the collector module or as disclosed by WRB of Figs 44 and 47. As to point 3, Cunningham teaches determining one or more paths associated with each of the plurality of communication

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devices as inherently disclosed in the communication process between the Telemetry gateway 6326 and the gas meter 6302, the electricity meter 6304, and all other monitored devices.

24. It is also worth noting that devices that is used in the monitoring art with the capabilities of transmitting and receiving for the purpose of controlling and managing other devices is not new in the art as disclosed by other such as Canada et al., US 5,907,491 (command station 6 of Fig. 1), or Tapperson et al., US 5,682,476 (controller 62 and 88 of Fig. 2).

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabil M El-Hady whose telephone number is (703) 308-7990. The examiner can normally be reached on 9:00 - 4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 7, 2004

A handwritten signature in black ink, appearing to read 'N. El-Hady', with a long, sweeping vertical stroke extending downwards from the end of the signature.

Nabil El-Hady, Ph.D, M.B.A.  
Primary Patent Examiner  
Art Unit 2154